

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A method for preparing a conjugate vaccine, the method comprising: reacting a polysaccharide with an oxidizing agent, whereby a solution of an aldehyde-activated polysaccharide is obtained;

buffer exchanging the solution of the aldehyde-activated polysaccharide to a pH of from about 7 to about 8;

reacting a protein with hydrazine or adipic acid dihydrazide in the presence of 1-[3-(dimethylamino)propyl]-3-ethyl carbodiimide hydrochloride at a pH of from about 6 to about 7, whereby a solution of an hydrazide-activated protein is obtained;

raising a pH of the solution of the hydrazide-activated protein to from about 7.0 to about 11;

buffer exchanging the solution of the hydrazide-activated protein to a pH of from about 10.0 to about 11.0;

reacting the aldehyde-activated polysaccharide with the hydrazide-activated protein at a pH of from about 6 to about 8, whereby a conjugate comprising one or more C=N double bonds is obtained; and

reducing substantially all of the C=N double bonds of the conjugate to C—N single bonds, whereby a conjugate vaccine capable of stimulating an immune response is obtained.

Claim 2 (original): The method according to claim 1, wherein the oxidizing agent comprises NaIO₄.

Claim 3 (original): The method according to claim 1, wherein the solution of the aldehyde-activated polysaccharide is buffer exchanged with a HEPES buffer.

Claim 4 (original): The method according to claim 1, wherein the solution of the hydrazide-activated protein is buffer exchanged with a Na_2CO_3 buffer.

Claim 5 (original): The method according to claim 1, wherein the aldehyde-activated polysaccharide is reacted with the hydrazide-activated protein at a ratio of from about 1:2 to about 2:1.

Claim 6 (original): The method according to claim 1, wherein reducing comprises reducing with NaBH_4 .

Claim 7 (original): The method according to claim 1, wherein the polysaccharide is selected from the group consisting of Meningococcal polysaccharides, Pneumococcus polysaccharides, *Hemophilus influenzae* type b polysaccharide, Vi polysaccharide of *Salmonella typhi*, and group B *Streptococcus* polysaccharides.

Claim 8 (currently amended): The method according to claim 1, wherein the protein is selected from the group consisting of tetanus toxoid, [diphtheria] diphtheria toxoid, CRM₁₉₇, and meningococcal protein.

Claims 9-18 (canceled)

Claim 19 (original): A conjugate vaccine, the conjugate vaccine comprising at least one polysaccharide moiety and at least one protein moiety, wherein the polysaccharide moiety is linked to the protein moiety through at least one linking group of the formula $-\text{C}(=\text{O})-\text{NH}-\text{NH}-\text{CH}_2-$.

Claim 20 (original): The conjugate vaccine of claim 19, wherein the conjugate vaccine comprises a plurality of polysaccharide moieties and a plurality of protein moieties crosslinked to form a lattice structure by a plurality of linking groups.

Claim 21 (original): The conjugate vaccine of claim 19, wherein the polysaccharide is selected from the group consisting of Meningococcal polysaccharides, Pneumococcus polysaccharides, *Hemophilus influenzae* type b polysaccharide, Vi polysaccharide of *Salmonella typhi*, and group B *Streptococcus* polysaccharides.

Claim 22 (currently amended): The conjugate vaccine of claim 19, wherein the protein is selected from the group consisting of tetanus toxoid, [diphtheria] diphtheria toxoid, CRM₁₉₇, and meningococcal protein.

Claims 23-32 (canceled)